

FIG. 1
Prior Art

FIG. 2

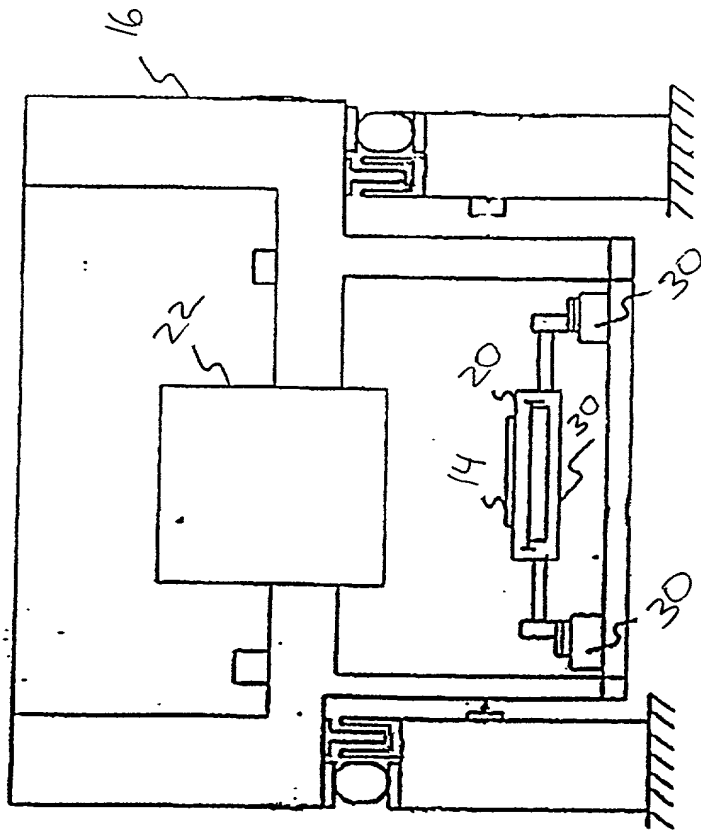


FIG. 2
Prior Art

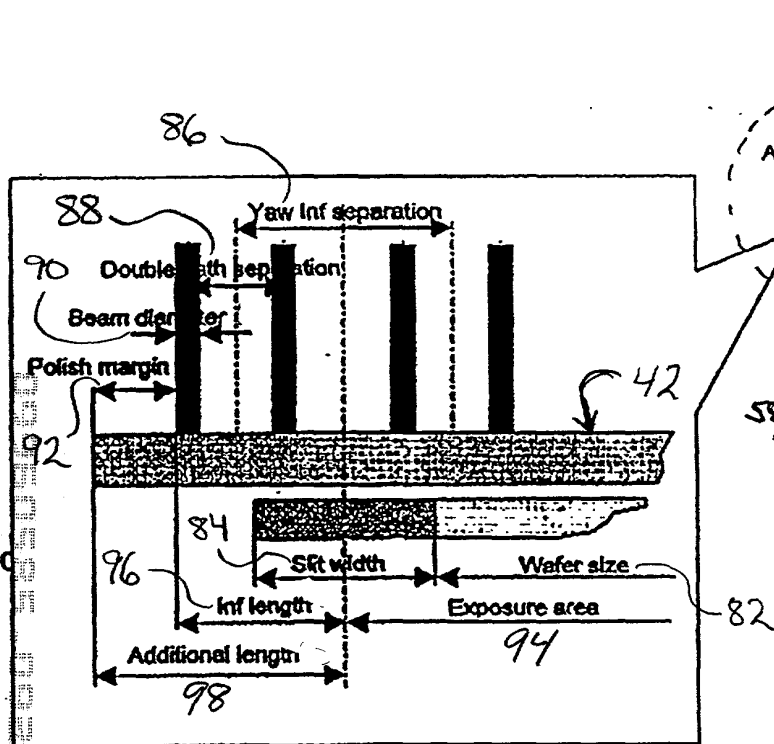


FIG. 46

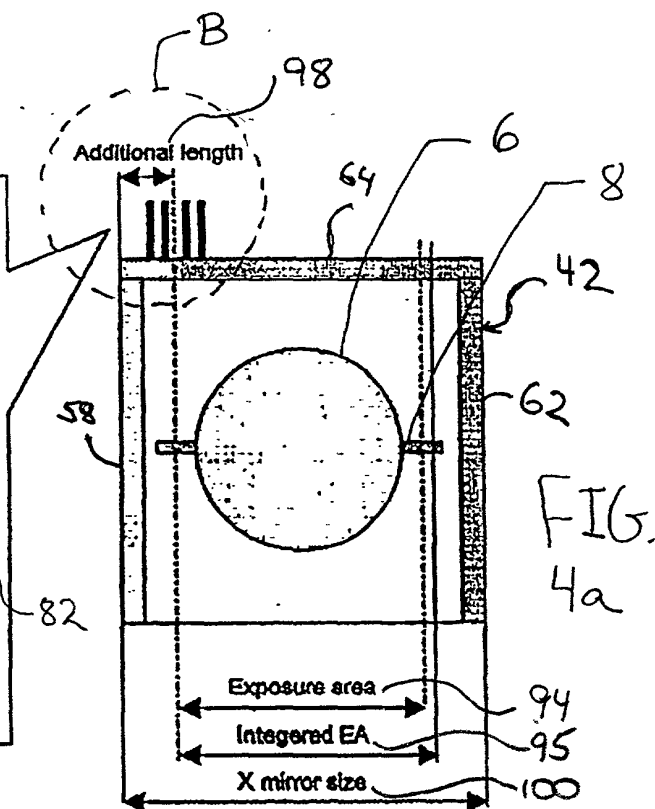
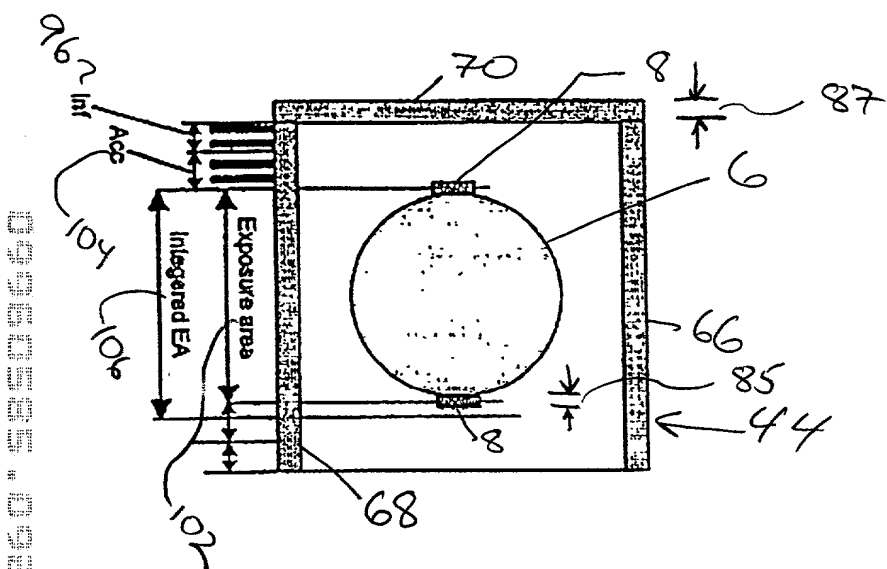


FIG. 4a



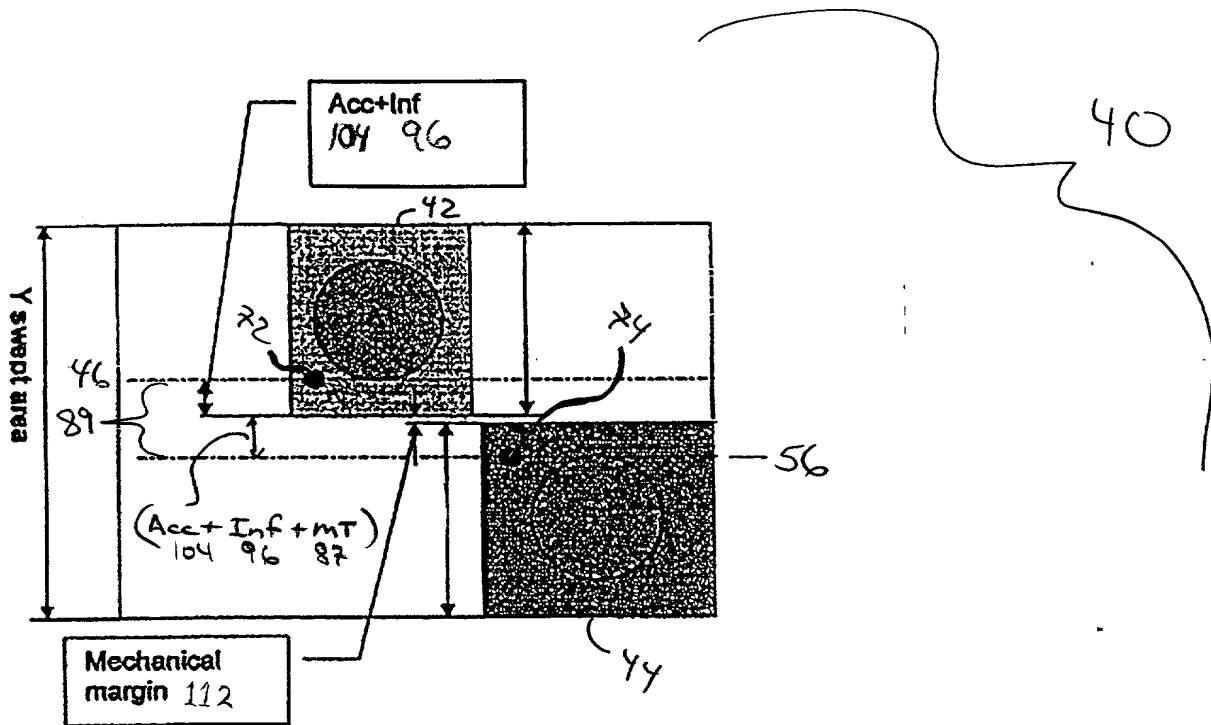
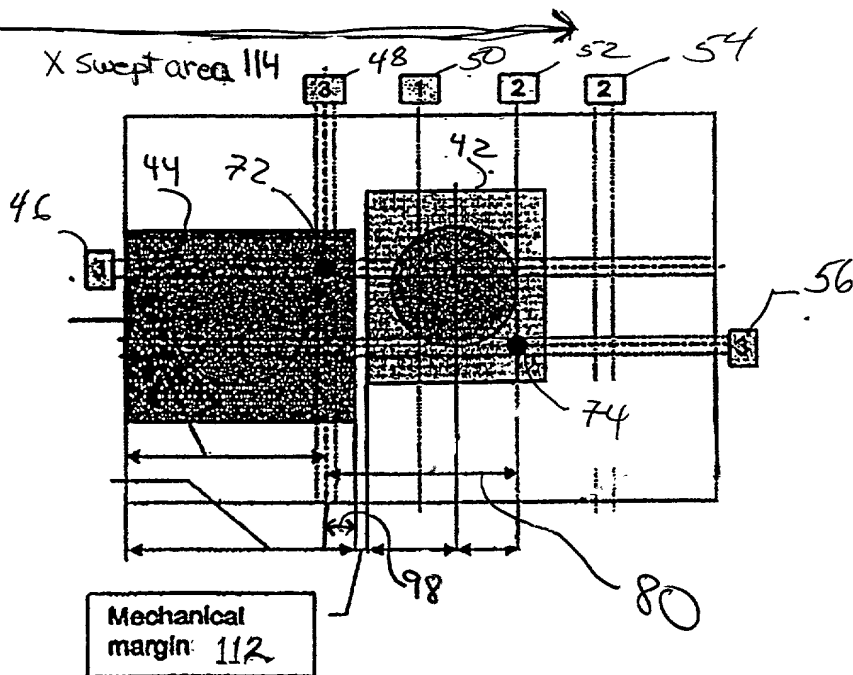
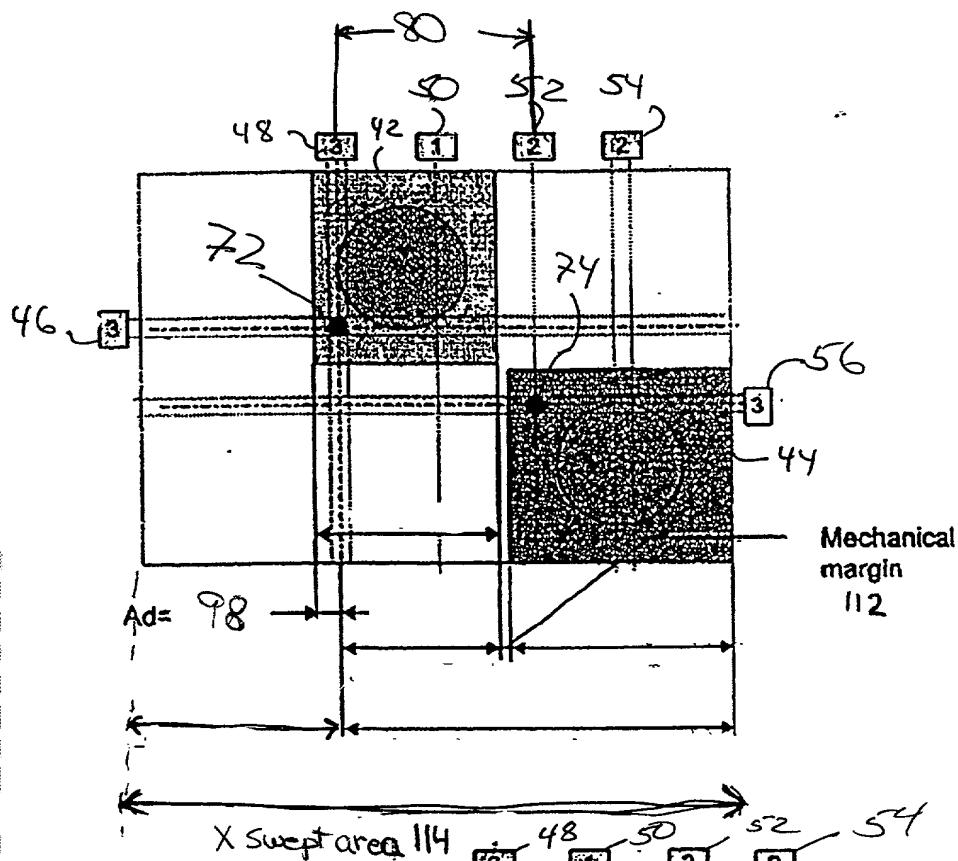


FIG. 7

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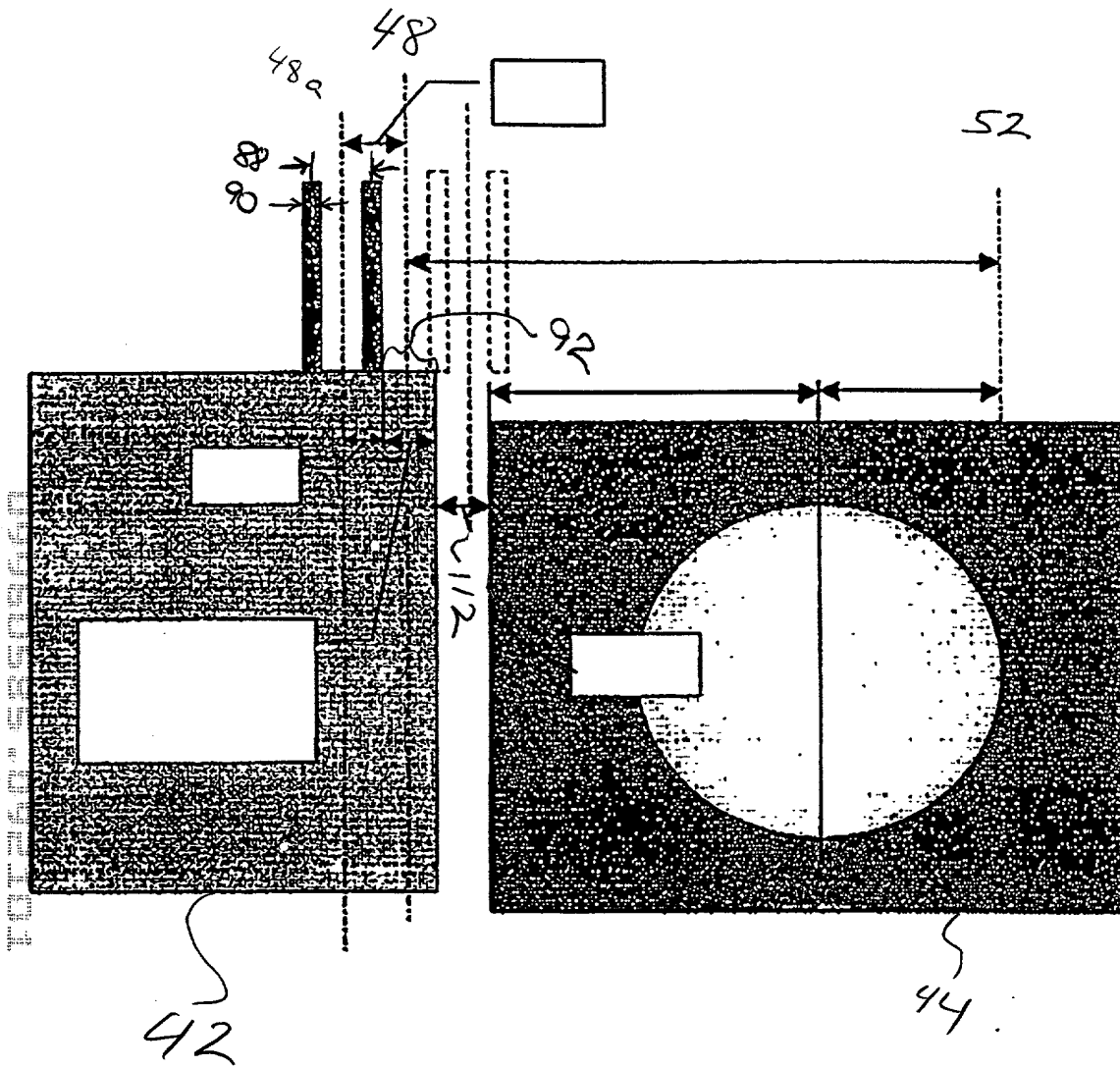


FIG. 10

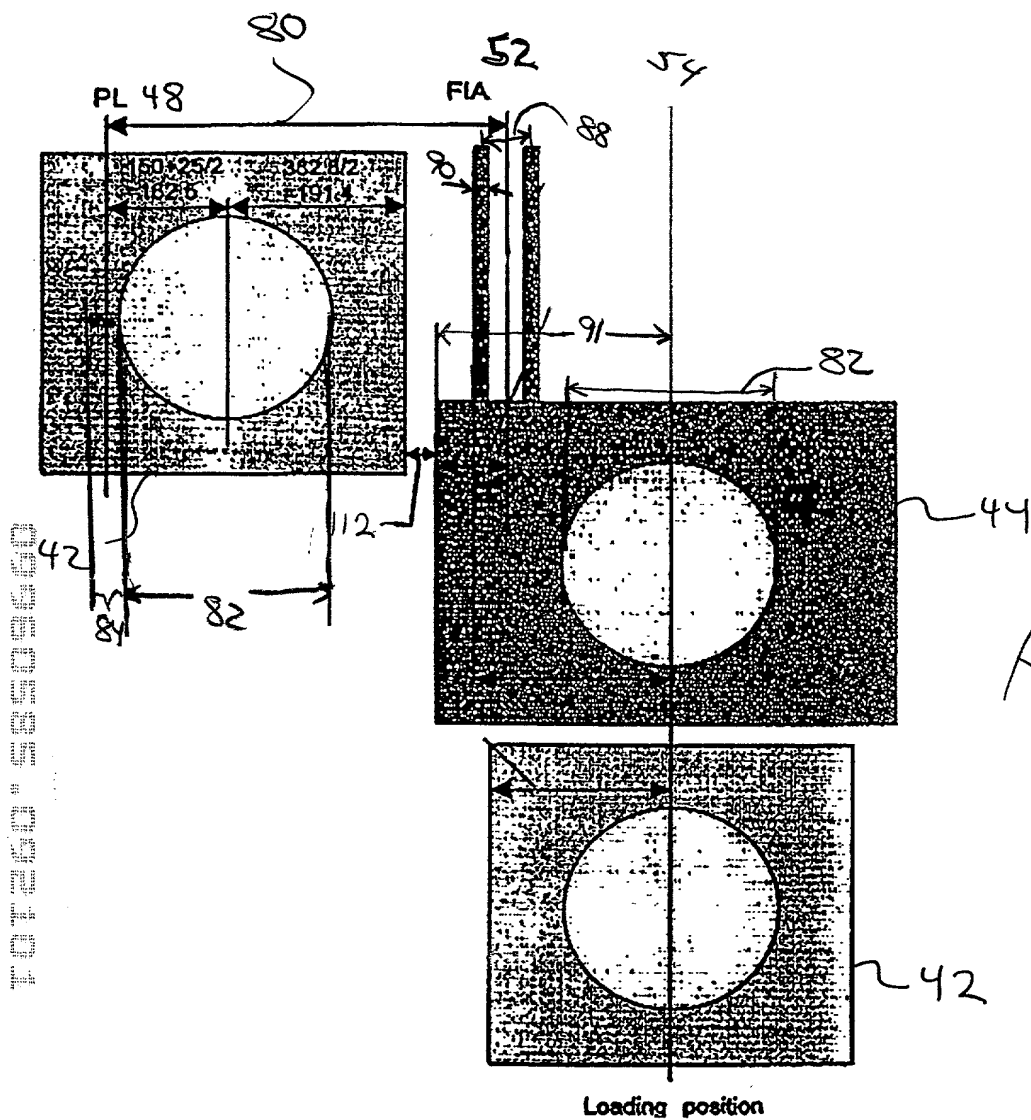
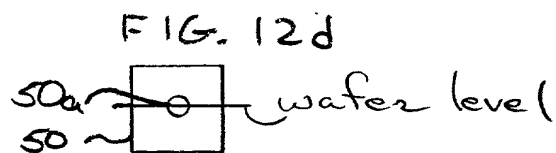
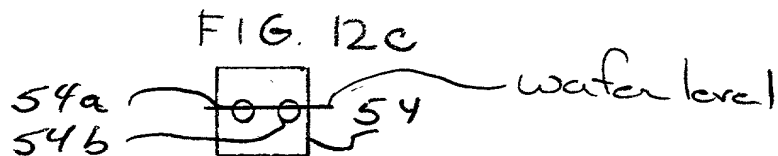
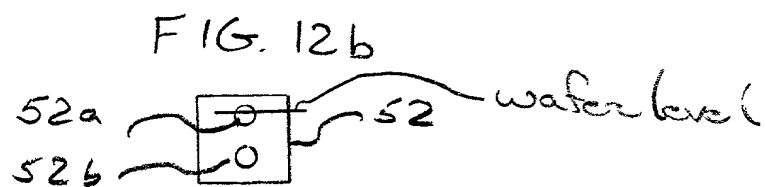
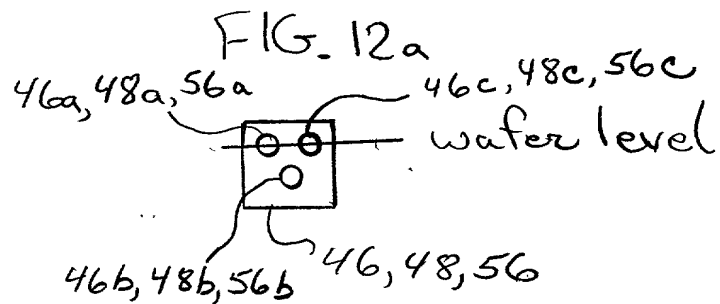
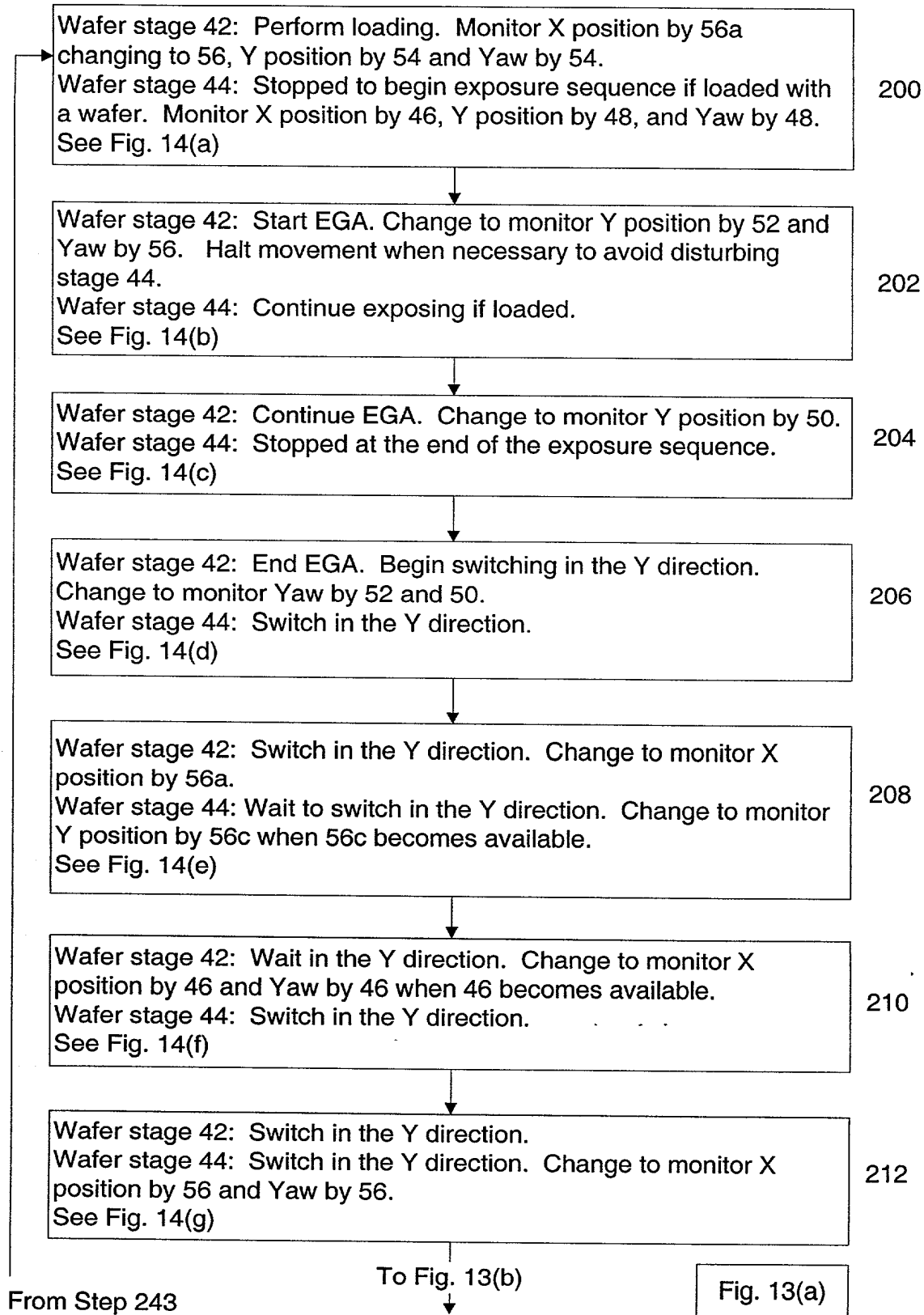


FIG. 11





To Fig. 13(a)
and step 200

Wafer stage 42: Switch in the X direction. Change to monitor Y position by 48c.
Wafer stage 44: Wait for stage 42 to finish moving. Change to monitor Y position by 48a.
See Fig. 14(h)

214

Wafer stage 42: Wait for stage 44 to finish moving.
Wafer stage 44: Switch in the X direction. Change to monitor Y position by 52.
See Fig. 14(i)

216

Wafer stage 42: Start exposure sequence. Change to monitor Y position by 48.
Wafer stage 44: Switch in the X direction. Change to monitor Y position by 54.
See Fig. 14(j)

218

Wafer stage 42: Start exposure sequence.
Wafer stage 44: Load the wafer.
See Fig. 3

220

Wafer stage 42: Continue exposure sequence.
Wafer stage 44: Continue loading. Change to monitor Y position by 52.
See Fig. 14(l)

222

Wafer stage 42: Continue exposure sequence.
Wafer stage 44: Perform EGA.
See Fig. 14(m)

224

Wafer stage 42: End exposure sequence.
Wafer stage 44: Continue EGA.
See Fig. 14(n)

226

Wafer stage 42: Stop in the safety position and wait for stage 44 to finish EGA.
Wafer stage 44: End EGA.
See Fig. 14(o)

228

To Fig. 13(c)

Fig. 13(b)

To Fig. 13(a)
and step 200

From Fig. 13(b) and step 228

Wafer stage 42: Stop in the safety position.
Wafer stage 44: Switch in the X direction.
See Fig. 14(p)

230

Wafer stage 42: Switch in the X direction. Change to monitor Y position by 50.
Wafer stage 44: Wait for 48a to become available to control Y position. Resume switching in the X direction.
See Fig. 14(q)

232

Wafer stage 42: Continue switching in the X direction.
Wafer stage 44: Wait in the switch X/wait position. Change to monitor Y position by 48a.
See Fig. 14(r)

234

Wafer stage 42: Continue switching in the X direction. Change to monitor Y position by 52.
Wafer stage 44: Wait in the switch X/wait position. Change to monitor Y position by 48 and Yaw by 48.
See Fig. 14(s)

236

Wafer stage 42: Continue switching in the X direction. Change to monitor Y position by 54 and Yaw by 54.
Wafer stage 44: Wait in the switch X/wait position.
See Fig. 14(t)

238

Wafer stage 42: Switch in the Y direction. Change to monitor X position by 56a.
Wafer stage 44: Switch in the Y direction. Change to monitor X position by 56c.
See Fig. 14(u)

240

To Fig. 13(d)

FIG 13(c)

To Fig. 13(a)
and step 200

From Fig. 13(c) and step 240

Wafer stage 42: Wait in the switchY/wait position then move to the loading position.
Wafer stage 44: Continue switching in the Y direction and attain the position to begin the exposure sequence. Change to monitor X position by 46.
See Fig. 14(v)

242

Yes

Continue to
process more
wafers ?

243

No

Wafer stage 42: Unload but do not reload. Change to monitor X position by 56.
Wafer stage 44: Start exposure sequence.
See Fig. 14(a)

244

Wafer stage 42: Move through the EGA movements without performing EGA, halting to avoid disturbing stage 44. Change to monitor Y position by 52 and Yaw by 56.
Wafer stage 44: Continue the exposure sequence.
See Fig. 14(b)

246

Wafer stage 42: Change to monitor Y position by 50.
Wafer stage 44: Stop at the end of the exposure sequence.
See Fig. 14(c)

248

Wafer stage 42: Switch in the Y direction. Change to monitor Yaw by 52 and 50.
Wafer stage 44: Switch in the Y direction.
See Fig. 14(d)

250

To Fig. 13(e)

Fig. 13(d)

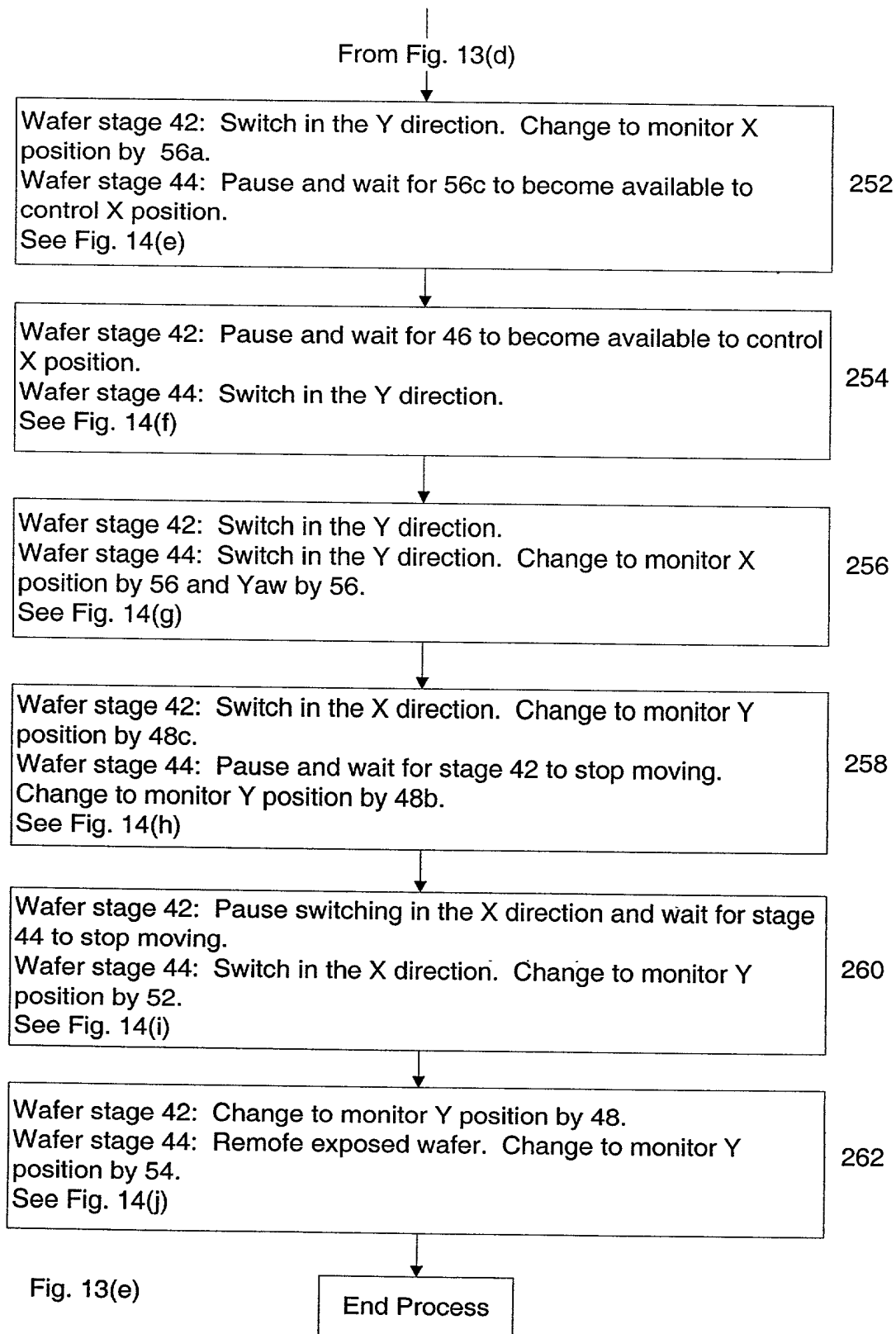


FIG. 14(a)

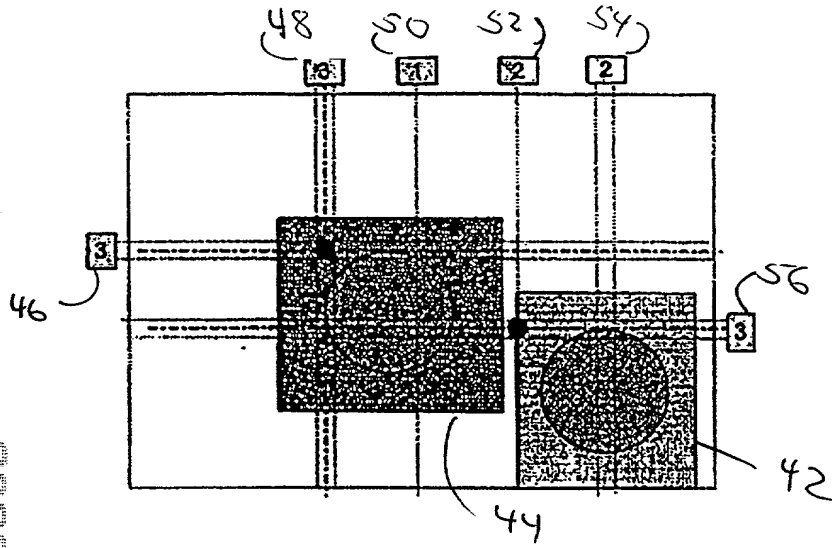


FIG.

14(a)

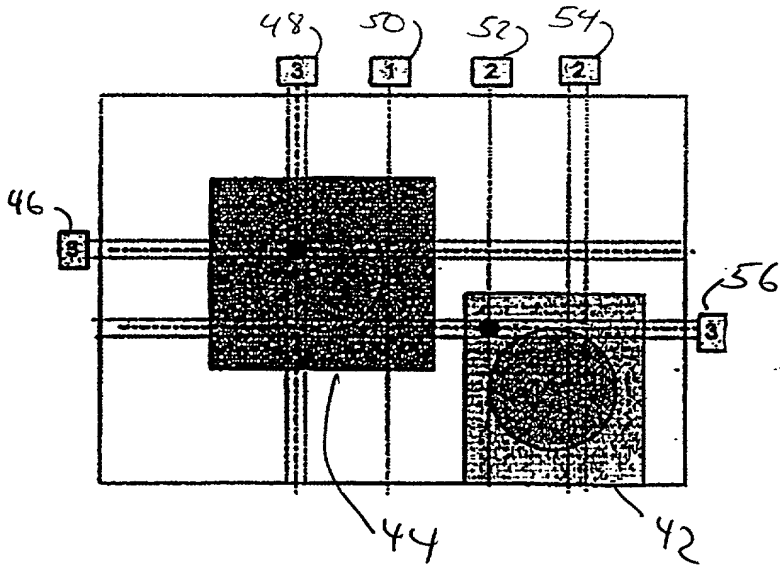


FIG.

14(b)

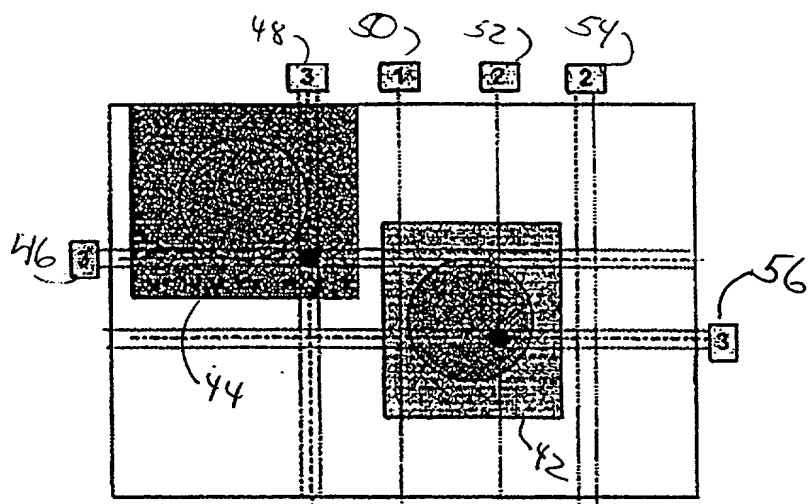


FIG.
14(c)

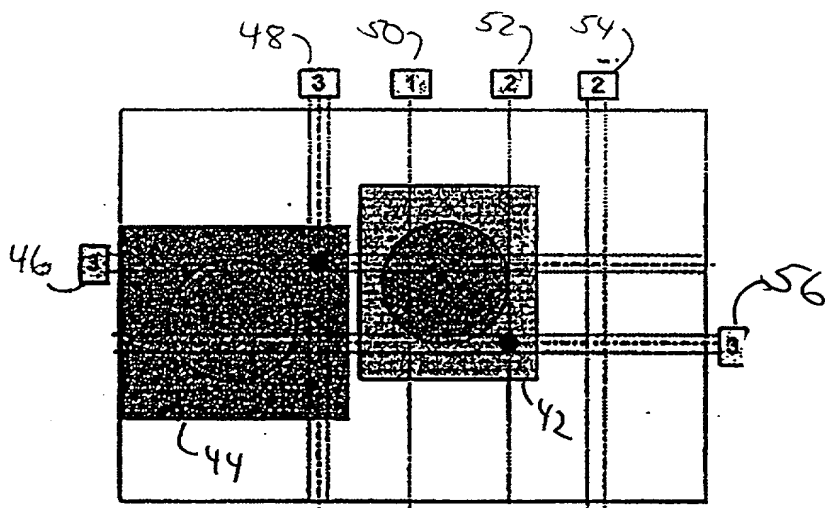


FIG.
14(d)

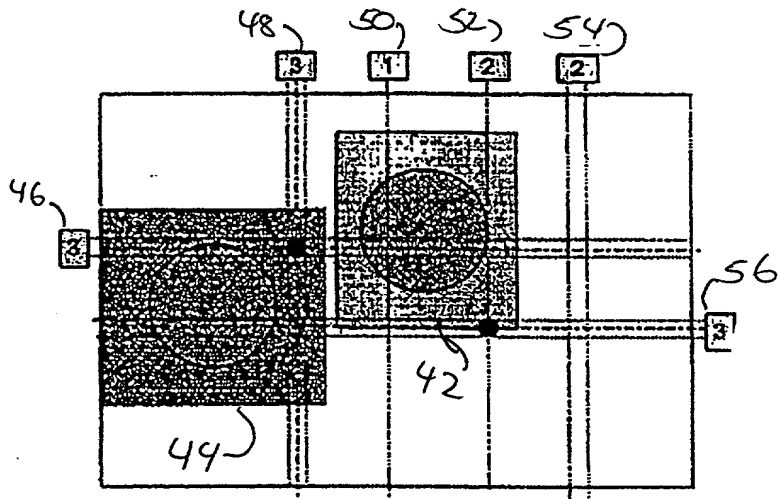


FIG.
14(e)

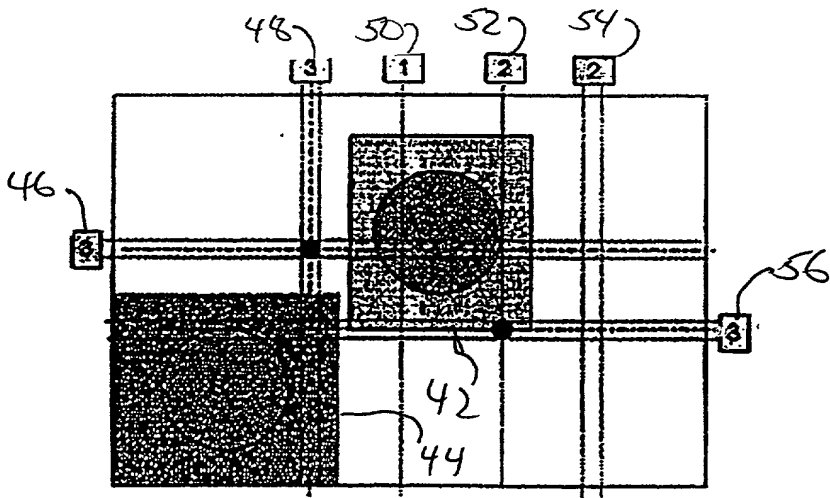


FIG.
14(f).

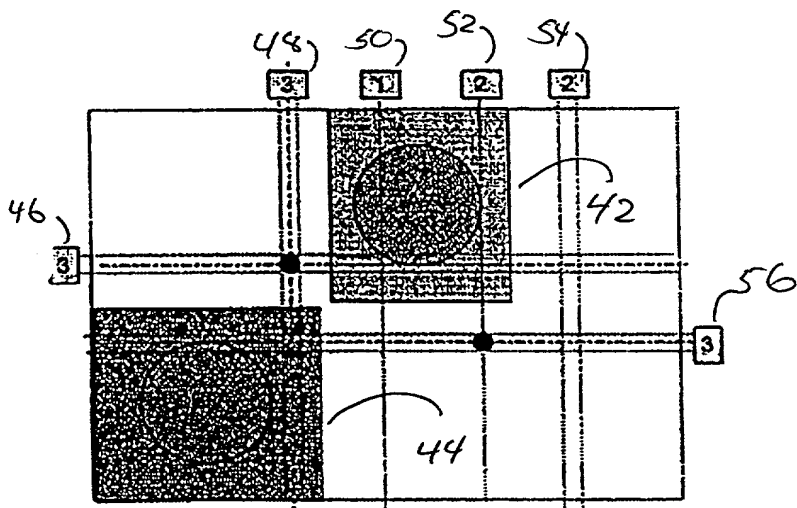


FIG.
14(g)

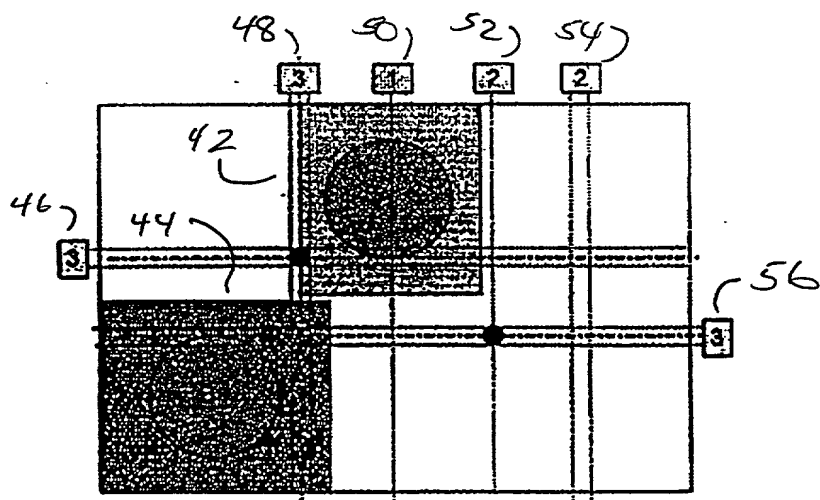


FIG.
14(h)

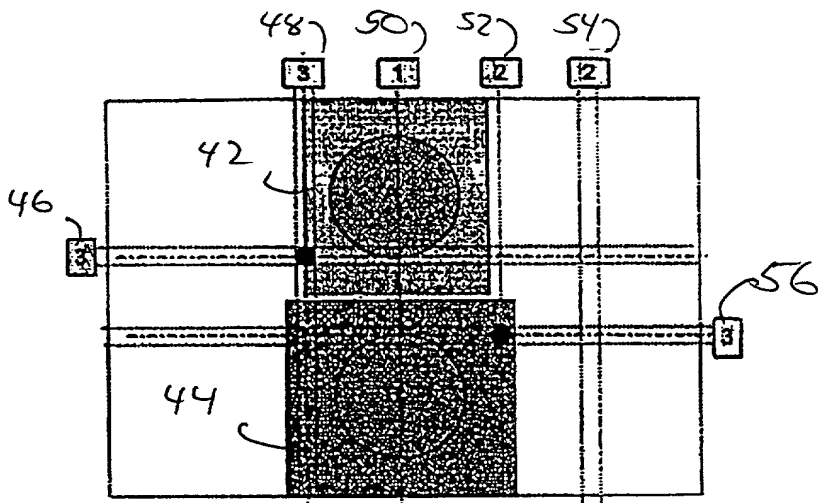


FIG.
14(i)

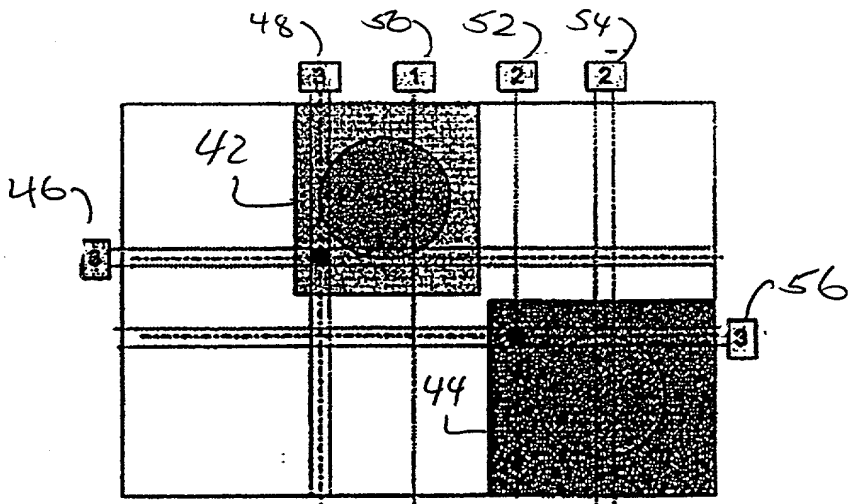


FIG.
14(j)

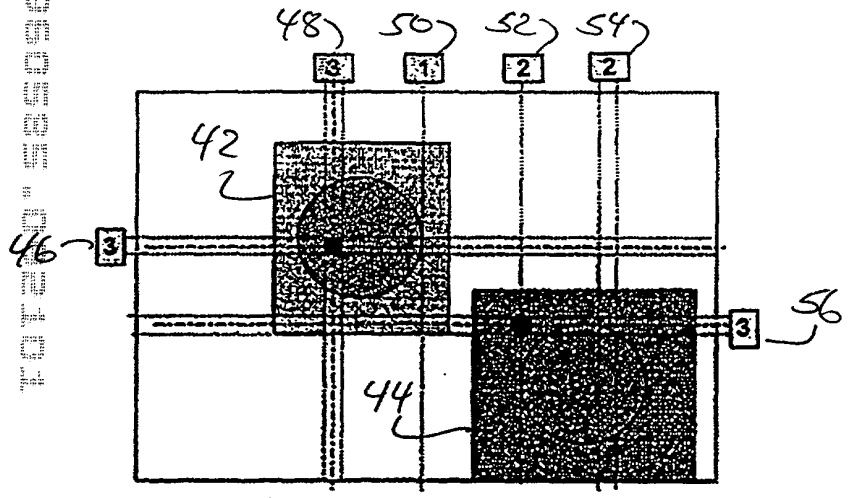
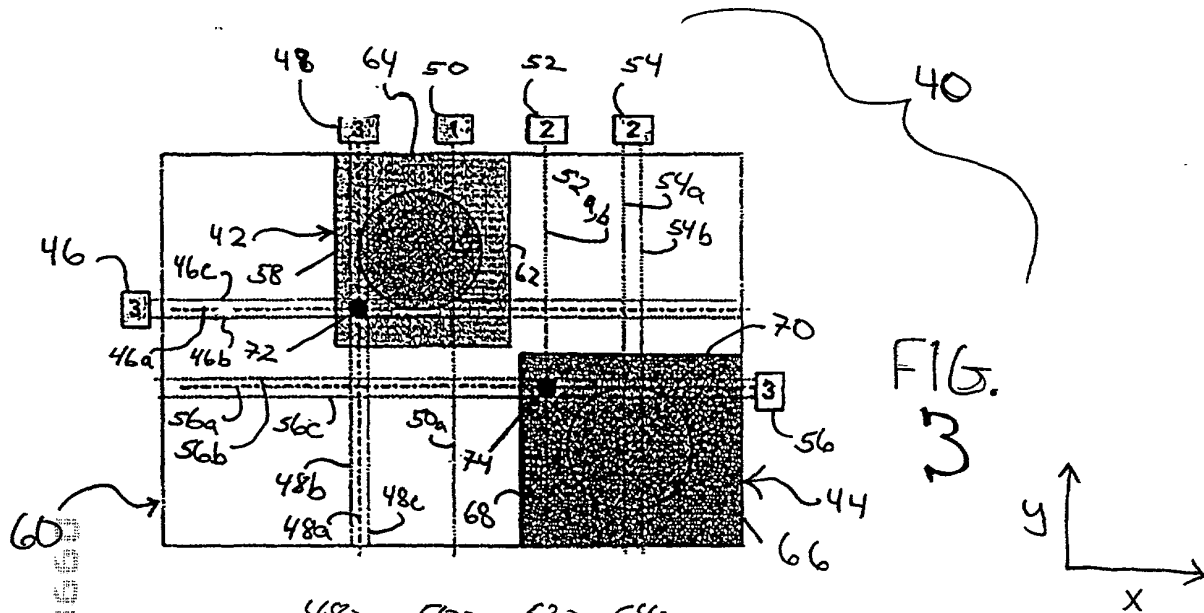


FIG.
14(L)

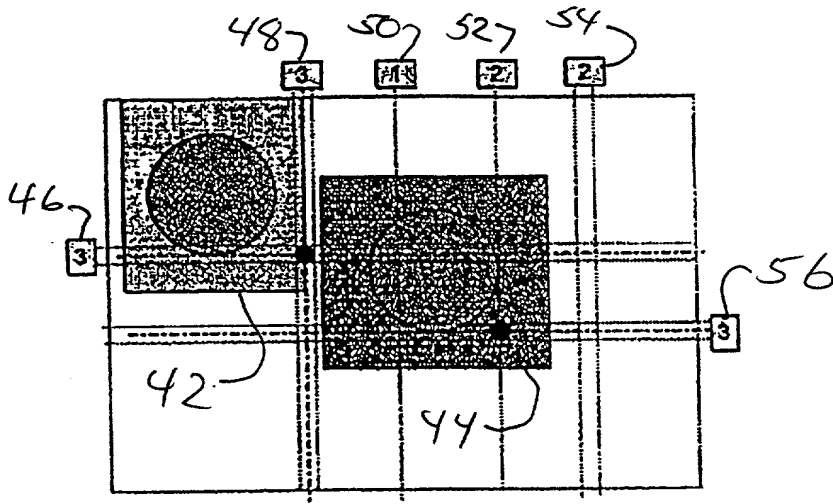


FIG.

14(O)

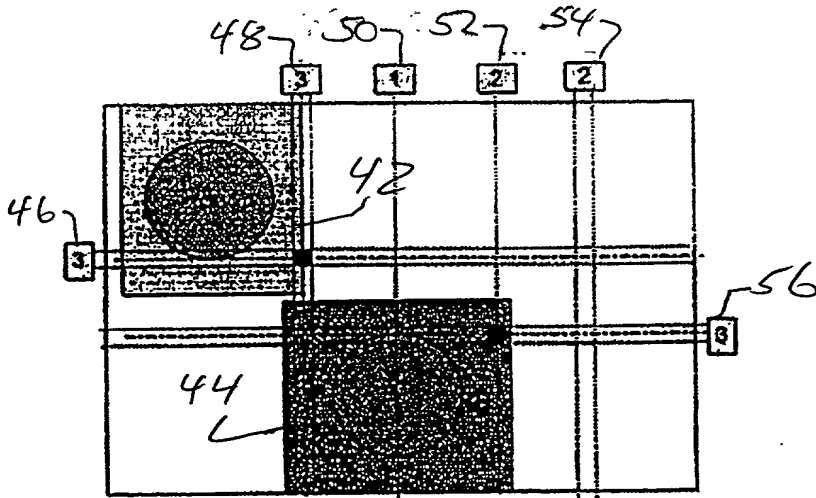


FIG.

14(P)

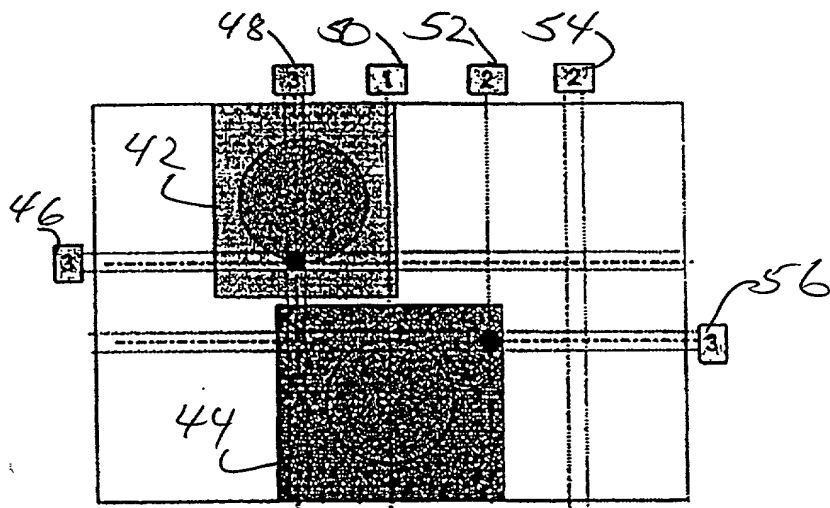


FIG.
14(g)

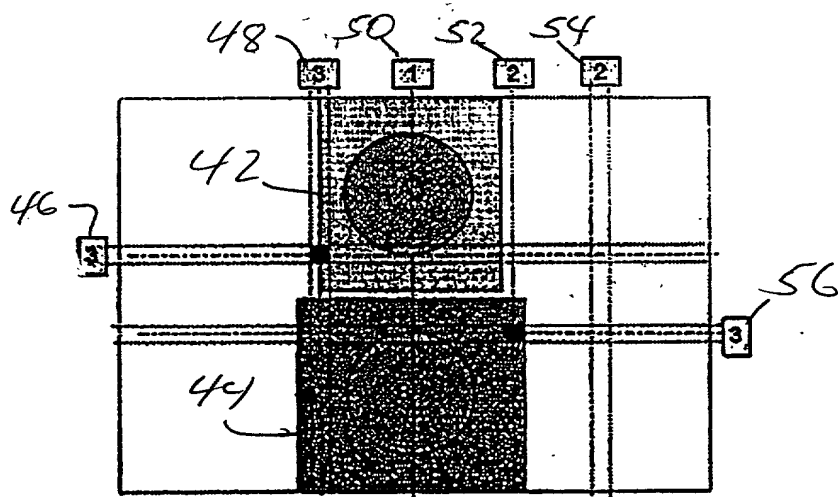


FIG.
14(r)

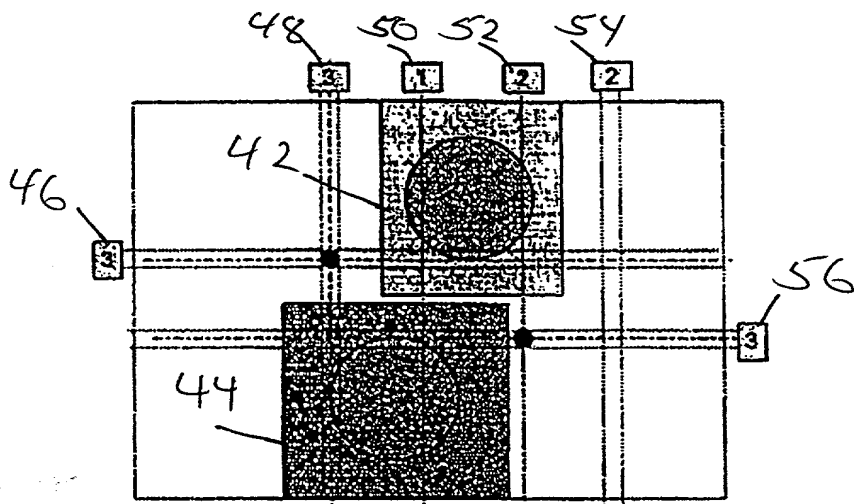


FIG.
14(s)

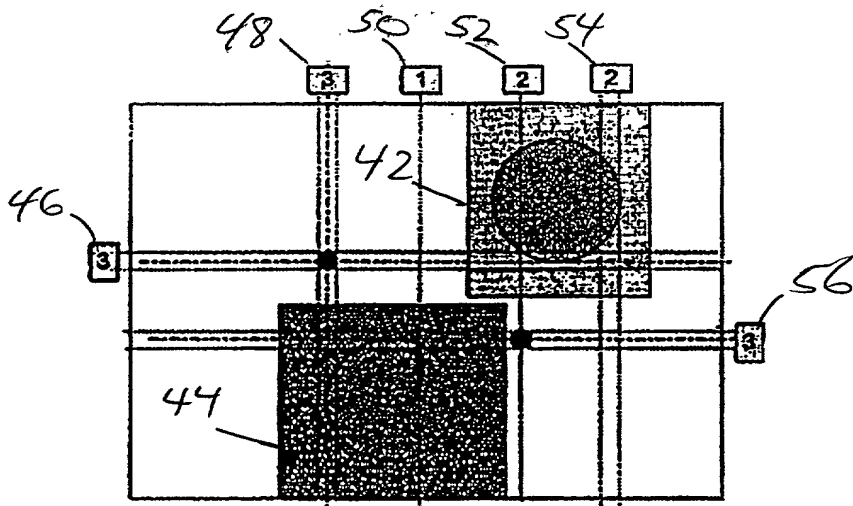


FIG.
14(t)

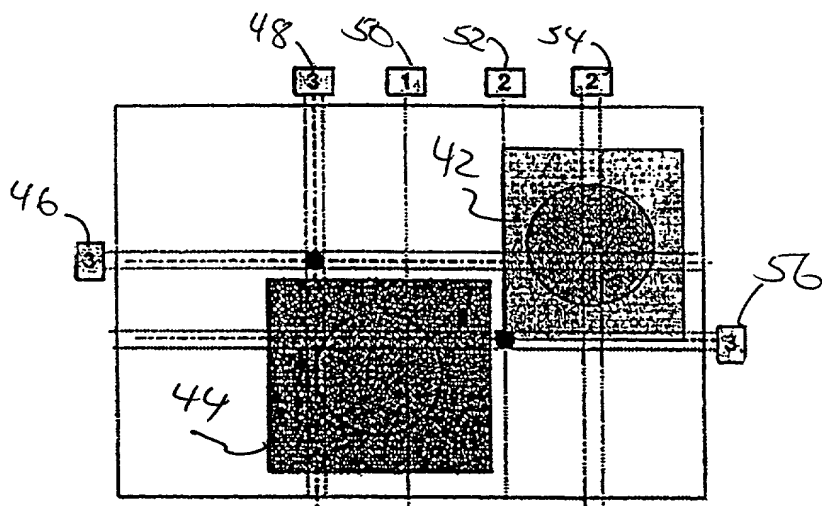


FIG.
14(u)

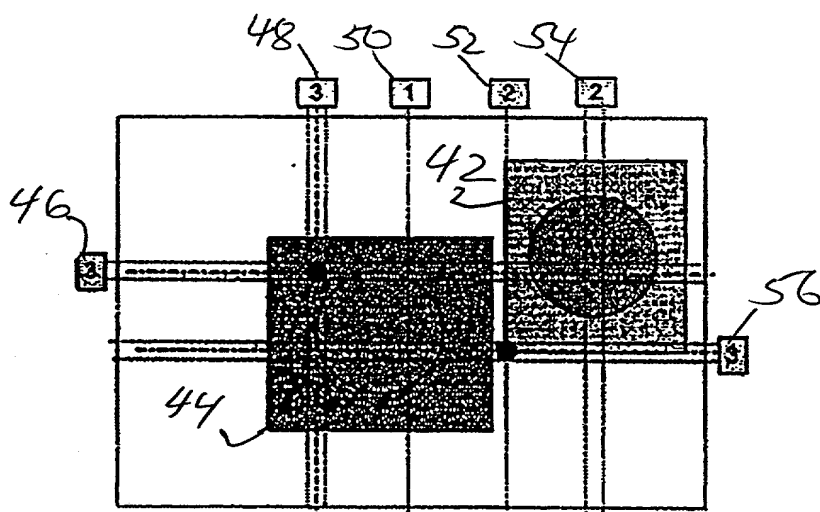


FIG.
14(v)